Editorial

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EDITORIAL

Universities are tasked to fulfil many roles in society, and what is meant by 'academic life' is not a simple thing to define. It varies from country to country, institution to institution, and even from department to department within the same institution. For new undergraduate students, their view of a university is normally that it is an institution whose main function is teaching, and that lecturers are for the most part concerned with, and spend their time dealing with, issues related to learning and teaching. This is reinforced, in some ways, by the design of many university websites, where 'courses/programmes' features prominently. First-year students often view a university as a kind of 'big school', the next one 'up' from that which many of them have recently left, far bigger in size, naturally enough, and all the more daunting for being so. They notice that new terminology such as 'lecturer', 'lecture theatre' and 'seminar' seem to be replacements for the familiar 'teacher', 'classroom' and 'class' of their high school days. However, as they slowly come to realize during the first term, a university is only in part a 'big school'. Puzzled faces at a department reception attest to their confusion as they are told that Dr X or Professor Y is not available for the next few days, or a week, as they are at a conference, or out on some research-related activity. For students, if 'lecturers' are 'teachers', but just with a different name in order to differentiate universities from schools, it is inconceivable to them that lecturers are not available all day every day in order to deal with their academic and/or pastoral concerns. When told that lecturers have only a one- or two-hour 'tutor hour' in which to see students during the working week, there is a growing realization that lecturers may not be dealing with learning and teaching issues all day every day, as was the case in their school. For those of us who teach students in their first term at university, one of the first issues to deal with is how we, as academics, should be addressed, and in what manner. The very first seminar demonstrates the confusion. Some put their hand up when they wish to say something, yet others say nothing, believing that hand-raising may not be the appropriate way to do so at university (it is a 'school thing'). However, if it is not hand-raising, then what to call the lecturer is the next hurdle. If their lecturer is Dr Sarah Andrews, should they call her Dr Andrews, Sarah or something else? Very often, 'miss' or 'madam', with no family name after it, the terminology used in schools, is selected, naturally enough.

Learning and teaching *is* at the core of a university. However, there is more, as students discover, very often to their amazement and, in some cases, with some concern. That 'more' is research. New students discover that lecturers have put themselves through a four-year (or more) programme of PhD-level study in order to be able to carry out effective research and that, for many, research is not merely a task such as preparing some lecture notes or dealing with a module-specific query but instead an absolute passion. After all, many lecturers could earn far higher salaries in industry or commerce, but choose to stay in academia for the sheer pleasure gained by carrying out the research work that they do. However much or little academic staff enjoy their research, it is these days an essential feature of academic life. Research performance and rankings of universities is the hot topic of the day in universities in the UK at the moment, as we gear up for the next round of 'assessment' of our performance. Like it or not, lecturers thus need to strike the appropriate balance between learning and teaching, and research, which is easier said than done.

Research is, however, not the preserve of academic staff. Indeed, core to most undergraduate programmes and to all postgraduate ones, is the requirement to carry out a significant piece of research. The final part of a programme involves some type of 'special project', which provides students with the opportunity to conduct an independent in-depth study related to their discipline. It is often regarded as the cornerstone of a degree programme, and as such is usually heavily weighted in terms of credits. As lecturers and PhD-holders, the majority of us have been recruited for our research skills and abilities, and so we know how to carry out/manage a piece of research. However, much as with driving, the ability to teach others to do so is another skill altogether. Being a brilliant driver does not necessarily mean that you will be a brilliant driving instructor, as students often learn to their cost when it comes to supervision. That said, it is our task to help our students to develop the skills and abilities needed in order to carry out a piece of research. In the first article, entitled 'Developing a research culture in the undergraduate curriculum', Joanne Garde-Hansen and Ben Calvert highlight the value of engaging students in the research work of lecturing staff. Commenting that whilst such collaboration is to be welcomed and encouraged, they rightly say that it involves a great deal of time and effort and that, in any busy environment, particularly those with limited resources, how to do so is a challenge. Setting out the advantages of such collaboration, the authors also point out the associated difficulties, not least of which is the potential mismatch in terms of student expectations of what a project, and a supervisor, is and is not. Central to the study described in the article is that students should be helped to develop the skills required in order to be independent and autonomous researchers. Using online focus groups, a conference and a problem-based learning activity, the

study describes the issues involved with developing a research culture, and the changing perceptions of students about research as they progressed from one level to another. Working with others, rather than alone, is what students in this study found particularly motivating and productive. The authors conclude with some helpful, practical recommendations as to how this might be implemented elsewhere. Importantly, their message is that we need to do a great deal more to ensure that student research work is not merely another assessment task, as any other. Instead, their research work, like our own, needs to be 'celebrated' and valued.

Research work is, naturally enough, the very essence of PhD-level study. However, the authors of the second article, Anthony P. Bromley et al., note that although this involves a scholarly piece of research, there is a growing realization, and demand, that it should it should assist in the development of researchers who are (more) able to function effectively in today's fast-evolving workplace. In their article, 'Investigating the baseline skills of research students using a competency-based self-assessment method', the authors note that whilst skills such as technical expertise and problem-solving are perhaps more readily developed through such a programme of study, there is evidence that those who have completed a PhD might perhaps lack the 'broader' skills such as communicating with, and working effectively with, others. This is perhaps unsurprising given that, in the UK at least, doctoral-level study is characterized as the 'lone scholar' approach. In this, budding researchers normally have only one-to-one contact with their supervisor, and on average only a few hours per month at most, although this varies according to the stage, naturally enough (more at both the beginning and the final stages, but less during the middle stages). Whilst there may be a few specially designed seminars or lectures at various points along the way, these are not compulsory in the 'traditional' PhD programme. Given that each researcher is working on their own individual piece of research (and each is different), it is small wonder, then, that such students experience a fair degree of isolation, however friendly the department or their supervisor and colleagues. However, as the authors rightly say, if we are to help our researchers to develop these 'broader' skills, we need first to find out their 'baseline' skills in order to both measure/assess any improvement at a later date but also in order to design an effective programme of study. Drawing on experience from industry, where such personal and professional development of the individual is standard, the authors describe two main approaches to such assessment, namely, training needs analysis and competence models. In their study, the authors describe the design and testing of their assessment methodology. Involving an online questionnaire whose design was informed by the skills and/or competencies identified by the 36 Research Councils, data were gathered from researchers who were in the first three months of

their study. Taking account of factors such as age and home/overseas, the strengths and weaknesses of both individuals and of the cohort as a whole provide both interesting reading and useful information for the institution itself, as well as for those of us who wish to carry out such an activity ourselves.

Presenting our students with problems and helping them to develop the skills in solving them is one such 'transferable skill' necessary for both PhD-level researchers and for undergraduate and postgraduate students alike. Now mainstream in higher education, problem-based learning (PBL) is said not only to help students to develop the task-specific skills of solving the problem(s) at hand but also to foster the 'wider social skills' which are valued not only in higher education but also in the workplace. Given the ubiquity of computer technology in the classroom today, most if not all of us use the technology, and PBL itself, to a greater or lesser extent. However, the authors of the third article, Peter Gossman et al., argue that there is a need for more evidence to support the claims about the perceived benefits of this approach to teaching. Entitled 'Integrating web-delivered problem-based learning scenarios to the curriculum', the study described in the article looks at how students' skills are or are not developed through using technology which supports PBL and whether or not it is more effective than a more 'traditional' approach. Given the perceived increase in time and effort associated with PBL, this is an important issue. Measuring 'gain', in terms of learning, is not without its difficulties, as the authors acknowledge. Whilst PBL often proves more popular with students given that they feel more engaged/involved in the task, something which the results of this study corroborate, there is more that we need to do in order to better understand its impact on learning and its advantages over the more 'traditional' methods which characterize higher education today, despite the (slow) move towards a more student-centred view of learning and thus approach to teaching.

Whether or not PBL fosters the development of the 'broader skill' of communicating effectively with others, this is a must, whether in the workplace or in higher education. Just as the computer has transformed how we engage with our learners both inside and outside the classroom over the last decade or so, other technology is now beginning to play a role in how we do so. The remarkable uptake of mobile phones in the UK (called cell phones in the USA and elsewhere) took many if not all of us by surprise. As the author of the fourth article 'Using text messaging to support administrative communication in higher education' reports, 88 per cent of people aged 15 to 34 owned or used a mobile phone at the time of the study, 2003. The article reports on a more recent survey, 2006, which reveals that 96 per cent of students own a mobile phone, with 86 per cent having used SMS (Short Message Service) or, as it is called in everyday usage, 'text messaging'

or 'texting'. This technology looks set to be no short-term fashion or fad but instead a part of normal, everyday life. As being at university is part of this normal, everyday life, it is perhaps unsurprising that there has been a surge in interest in how we might harness such technology in learning and teaching in higher education. Laura Naismith, author of this fourth article, explains how this technology is used outside the higher education sector, and offers an insight into its potential for us, as educators, in helping our students to learn, citing studies which attest to its contribution and value. However, as the author says, its integration into the provision is not without its challenges, for both students and staff alike. The study described in the article details a case study of the implementation and subsequent testing of a text-messaging service. Analysis of the messages by type revealed how the service was actually used, and feedback from the students provided an insight into their perceptions of its value. Of note in this study is that the views of academic and administrative staff were also gathered, thus taking into account the views of *all* stakeholders in the system. As communication is a two-way activity, the results shed some interesting light on how text-messaging was, and was not, used in responding to communication from academic and administrative staff. Alerting us to the implications for practice in our own institutions, this study doubtless makes its contribution to an area of research activity which, like text-messaging itself, is destined to become mainstream.

Another of the 'broader skills' that we wish to develop in our students, and in ourselves, is effective self-evaluation; this is key to learning/development. After all, if we do not recognize our strengths and weaknesses, we cannot build on the former or work on improving the latter. Evidence from the literature suggests that self-evaluation improves with time. One way in which we, as educators, assist students in understanding and evaluating their performance is via the feedback that we give them on their coursework or examinations. Marking is an enormously time-consuming task for us, even if work is submitted and returned electronically. If marking the work is not difficult enough, a further issue for those marking it is the detection of plagiarism. There is a perception, although little hard evidence it seems, that plagiarism is on the increase. As Stephan Dahl, author of the fifth and final article reports, we have taken various measures to try to combat this, including making students (more) aware of plagiarism, explaining (if we had not done so already) what constitutes plagiarism. In this article, entitled 'Turnitin®: the student perspective on using plagiarism detection software' the author rightly notes that the issue of plagiarism is complicated by the fact that we are not too sure ourselves, and that even within the same institution, those in different disciplines view it, and deal with it, differently. However, when we suspect that a student may have plagiarized an amount

of material, however great or small, technology is now available to assist us in ascertaining the source, or sources, of what is not the student's work. Without such evidence there is, rightly, no case of plagiarism for the student to answer, as they must be considered innocent until there is reasonable evidence to conclude that they are guilty of such a disciplinary offence.

As the penalty for plagiarizing work could result in expulsion, with no award, we need that evidence to be substantial and robust. Findings from the study described in the article suggest that students are very positive about its use. The study revealed that there were two noticeable effects since the introduction/use of Turnitin®. One, it acts as a deterrent. Two, it prompts students to seek advice about how to reference correctly and thus avoid plagiarizing. Three, cases of plagiarism, whilst not eradicated, are reduced. As the author of the fourth article would likely agree, technology assists human decision-making and does not replace it, that is, we cannot rely solely on the 'judgement' of an electronic system such as Turnitin® to make such decisions *for* us. Nonetheless, it is a valuable tool, and one which we will likely make great use of, if we do not do so already. Learning how to reference correctly in a piece of academic writing is but one of the challenges facing our learners and, as with most things in life, the start is often the most difficult part, as there is so much information to take on board, all at once. Managing/doing academic work, including learning how to write effectively (and reference the work of others appropriately) is but one of the many challenges that new students face as they learn what is, and is not, part of the research culture in which we all work. As it is one of the most fundamental of skills for the budding researcher, undergraduate or postgraduate, we have much, much more to do in helping our students to engage appropriately in developing and enhancing the professional research culture which is at the heart of higher education.